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SUGGESTED STATEMENT ON SCREW-WORM RESEARCH
FOR USE BY RURAL PAPERS AND STATE INSTITUTIONS

Prepared for Senator Lister Hill by Bureau of Entomology
and Plant Quarantine, U. S. Department of Agriculture

Stepped-up U. S. Department of Agriculture research aimed at finding ways of wiping out the destructive screw-worm in the Southeast will get another boost if the Senate Appropriation bill calling for an additional $10,000 for this work in 1953 is passed by Congress. The screw-worm is currently costing Southeastern livestockmen and farmers $10 million annually.

Each spring, the screw-worm flies move north from Florida, where they overwinter, attacking open wounds on all kinds of livestock. The adult female screw-worm fly lays her eggs on the open scratches and wounds of an animal, which hatch into tiny maggots that work their way into the flesh, consuming it as they go. Their attack seriously weakens the animal; often resulting in its death.

Much has been done by the USDA's Bureau of Entomology and Plant Quarantine through its normal research program to curb the damage of this pest. Among these accomplishments can be listed the development of EQ-335, a treatment that kills the maggots feeding in a wound and the female adult attempting to lay her eggs in the wound. These developments have been of great value in reducing losses due to the screw-worm. However, they do not provide the means for completely eliminating the pest. The Southeastern livestock raisers are therefore faced with a year by year fight against the insect. However, a year ago Congress authorized $20,000 to start a research program that may ultimately lead to eradication of the screw-worm.

In this new, unique, and far-reaching approach to the screw-worm problem, now underway in Florida, entomologists are determining if it is feasible to raise millions of male screw-worm flies which have been made incapable of reproducing by exposure to atomic radiations. The entomologists have found in laboratory studies that normal female screw-worm flies which mate with such released sterile males will lay infertile eggs. Tests on Sanibel Island near Fort Myers, Fla., during the past year have shown that some of the screw-worms already present on the Island produced infertile eggs after releasing males that were treated with the atomic rays.

Investigations during the last year also tend to confirm the belief that the number of screw-worm flies present at any one time is not very great, even though those present cause great damage to livestock and certain wild animals. Twenty-five stockmen in Florida have cooperated in this study.

The objective of the new research program is to gain more information on the number of flies present in various areas during different periods of the year, especially during the winter months when cold weather has reduced their numbers. When such information is obtained it is planned to release each week for several weeks 5 or 10 times as many sterile males as normal wild males in an experimental area to determine if they will reduce correspondingly the number of wild normal females that can infest animals. Experiments on a small scale in different areas and at different times of the year will be necessary to test the effectiveness of this method of control.

Final conclusions as to the success of this method of control cannot be made until further research provided for by Congress has been completed.